



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,882	04/13/2004	Richard Simons	H0006930-0766(1164.116310	4002
128 7590 08/01/2008 HONEYWELL INTERNATIONAL INC. 101 COLUMBIA ROAD P O BOX 2245 MORRISTOWN, NJ 07962-2245			EXAMINER BHAT, ADITYA S	
			ART UNIT 2863	PAPER NUMBER
			MAIL DATE 08/01/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/822,882

**Applicant(s)**

SIMONS, RICHARD

**Examiner**

ADITYA S. BHAT

**Art Unit**

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20, 29, 30 and 35-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20, 29, 30 and 35-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 39-40 & 42-45 are rejected under 35 U.S.C. 102(e) as being anticipated by Hill et al. (USPN 7,092,794).

With regards to claim 39, Hill et al. (USPN 7,092,794) teaches a method for determining which of a plurality of HVAC systems will require maintenance, the method comprising the steps of:

transmitting a test request to each of the plurality of HVAC systems from the remote location; (Co1.2, lines 15-21 )(fig 1 )

performing one or more tests on at least selected ones of the HVAC systems in response to the test request, and producing a test result for each of the selected HVAC systems; (Co1.2, lines 21-24)

transmitting the test result for each of the selected HVAC systems to a remote location; (Col. 2, line 22)

storing the test results at the remote location; (Co1.2, line 25-26)and

identifying which of the HVAC systems will likely need service by analyzing the test results. (Col.4, lines 39-40)

With regards to claim 40, Hill et al. (USPN 7,092,794) teaches a providing different test requests to at least two of the plurality of HVAC systems,(fig I &7) wherein each test request identifies a different test to perform.(Col. 3, lines 30-33)

With regards to claim 42, Hill et al. (USPN 7,092,794) teaches a scheduling service on at least some of the HVAC systems that have been identified as likely needing service. (Col. 4, lines 41-42)

With regards to claim 43, Hill et al. (USPN 7,092,794) teaches a method of remote testing of HVAC systems comprising the steps of:

transmitting one or more maintenance signals from a remote unit to a specified group of customer HVAC systems, the specified group being a number less than a total number of customer HVAC systems in a customer database; (Col. 2, lines 60-64)

receiving the one or more maintenance signals at each of the HVAC systems, the one or more maintenance signals activating an HVAC component; (Col. 2, lines 25-29)

performing a self-test on the activated HVAC component based on the received one or more maintenance signal; (Col. 4, lines 8-14)

generating self-test result signals from the activated HVAC component based on the self-test preformed on the activated HVAC component; (Col. 2, lines 16-20)

transmitting the self-test result signals from the HVAC system to the remote unit; and receiving the self-test result signals from the HVAC systems at the remote unit. (col.4, lines 8-10)

storing the test results at the remote location. (Col. 4, lines 27-28)

With regards to claim 44, Hill et al. (EP 1 196 003 A2) teaches determining the specified group of customer HVAC systems based on the specified group of customer HVAC systems being within a specified geographic area prior to the step of transmitting the one or more maintenance signals. (figure 6-7)

With regards to claim 45, Hill et al. (EP 1 196 003 A2) teaches determining which customer HVAC systems from the specified group of customer HVAC systems likely require maintenance based on the self-test signals received by the remote unit. (see figure 7)

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hill et al. (USPN 7,092,794).

With regards to claim 46, Hill et al. (USPN 7,092,794) does not appear to teach performing maintenance in response to a diagnostic test yielding faulty results.

It would've been obvious to one of ordinary skill in the art at the time of the invention to modify the Hill teaching to include performing maintenance in response to a faulty HVAC unit diagnostic test in order to have the HVAC unit running and providing the service it was manufactured to perform.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20, 29-30, 35-38 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hill et al. (USPI/ 7,092,794) in view of AndelmanLelek (NPL).

With regards to claim 41, Hill et al. (USPI/7,092,794) does not appear to teach charging for services rendered.

AndelmanLelek (I/PL) teaches charging for services rendered.(Page 5, fee section)

It would've been obvious to one of ordinary skill in the art at the time of the invention to modify the Hill teaching in order to charge for services taught by AndelmanLelek (I/PL) as it is commonly known that in order to run a viable business a monetary value must be assigned to services rendered.

With regards to claim 1, Hill et al. (USPI/7,092,794) teaches a method for testing an HVAC system for a building structure from a remote location outside of the

building structure, the HVAC system having an active component and a dormant component, the method comprising the steps of:

receiving a test request from the remote location; (Col. 4, lines 8-10)

transmitting the test result to a location outside of the building structure for subsequent analysis, and (Col. 4, lines 14-20)

With regards to claims 2 and 4, Hill et al. (USPN 7,092,794) teaches that a component is a heating component or a cooling component. (14; figure 1)

With regards to claim 3 and 5, Hill et al. (USPN 7,092,794) teaches that a component is a cooling component or a heating component. (14; figure 1)

With regards to claim 6, Hill et al. (USPN 7,092,794) teaches the test request is received from a remote computer. (12)

With regards to claims 7-10, Hill et al. (USPN 7,092,794) the test request is received from the remote computer via a telephone line connection, from the remote computer via a wireless connection, from the remote computer via a computer network, from the remote computer via the internet. (Col. 2, line 55-60)

With regards to claims 11-12, Hill et al. (USPN 7,092,794) teaches a gateway for receiving the test request from the remote computer, and for communicating with the HVAC system wherein the gateway stores one or more tests. (figure 7)

With regards to claim 13, Hill et al. (USPN 7,092,794) teaches the gateway submits at least one of the one or more tests to the HVAC system in response to the test request. (Col. 3, line 40-45)

With regards to claim 14, Hill et al. (USPN 7,092,794) teaches a subset of the one or more tests and submits the subset of the one or more tests to the HVAC system in response to the test request. (Col. 3, lines 29-34)

With regards to claim 15, Hill et al. (USPN 7,092,794) teaches the HVAC system includes two or more zones, and the test that is performed activates the primarily dormant component in conjunction with each of the two or more zones. (Col. 2, lines 25-29)

With regards to claim 16, Hill et al. (USPN 7,092,794) teaches transmitting a test request to two or more HVAC systems from the remote location. (see figure 1)

With regards to claim 17, Hill et al. (USPN 7,092,794) teaches the performing step performs a test on the primarily dormant component of the two or more HVAC systems in response to the test request, and produces a test result for each HVAC system. (see figure 7)

With regards to claim 18, Hill et al. (USPN 7,092,794) teaches the transmitting step transmits the test result for each HVAC system to a location outside of the building structure. (See figure 1)

With regards to claim 19, Hill et al. (USPN 7,092,794) teaches the remote location is the same as the remote location that the test result is transmitted. (see fig 1)

With regards to claim 20, Hill et al. (USPN 7,092,794) teaches the remote location is different than the remote location that the test result is transmitted. (fig 7)



With regards to claims 29 and 30, Hill et al. (USPN 7,092,794) teaches a method for testing an HVAC system for an inside space, the HVAC system having a heating/cooling component, the method comprising the steps of: receiving a test request that is provided from a location remote from the building(see fig 1)

With regards to claim 35, Hill et al. (USPN 7,092,794) teaches a method for testing a plurality of HVAC systems each in a different building structure or in a different region of a common building structure from a remote location, the HVAC systems having an active component and a dormant component, the method comprising the steps of:

transmitting a test request to each of the plurality of HVAC systems from the remote location; (col. 4, lines 9-10)

performing one or more tests on each of the HVAC systems in response to the test request, and producing a test result for each of the HVAC systems, wherein at least one of the one or more tests that is performed activates and tests one or more of the active or dormant components of an HVAC system; (Col. 4, lines 5-13)

transmitting the test result for each of the HVAC systems to a remote location, (fig 1) and storing the test results at the remote location. (Col. 4, lines 39-40)

With regards to claims 36-38, Hill et al. (USPN 7,092,794) teaches at least one of the one or more tests that is performed activates and tests the active component of the corresponding HVAC system in response to the test request. (Col. 3, lines 30-34)

Hill et al. does not appear to teach performing a test on the dormant component of the HVAC system in response to the test request, and producing a test result wherein the active or dormant component is the heating or the cooling components. AndelmanLelek teaches performing a test on the dormant component of the HVAC system in response to the test request, and producing a test result wherein the active or dormant component is the heating or the cooling components (page 5 seasonal testing paragraph).

It would've been obvious to one skilled in the art at the time of the invention to modify the Hill teaching to include the off season testing taught by AndelmanLelek in order to ensure that the HVAC system was functioning properly before the season change and to minimize/eliminate service interruption.

### ***Response to Arguments***

Applicant's arguments filed 6/12/2008 have been fully considered but they are not persuasive.

Applicant is reminded that during patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification." Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

While the meaning of claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims, this is not the mode of

claim interpretation to be applied during examination. During examination, the claims must be interpreted as broadly as their terms reasonably allowed. This means that the words of the claim must be given their plain meaning unless applicant has provided a clear definition in the specification. In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989).

In this instance applicant argues that the prior art of record does not teach or suggest;

1) performing one or more tests on at least on at a least selected ones of the HVAC systems in response to the test request, and producing a test result each of the selected HVAC systems, transmitting the test result for each of the selected HVAC systems to a remote location, as well as other elements of claim 39. Applicant does not believe it can readily be argued that merely querying an HVAC device for status information is equivalent to performing one or more tests on at least selected ones of the HVAC systems in response to a test request, as recited in claim 39. Querying an HVAC device for status information would clearly not actively perform any tests on the HVAC device. (Col.2, lines 59-64)

Clearly, this section teaches an entry device which a user remotely accesses diagnostic information. This diagnostic information is accessed in response to a user's entry through the entry device. The pending claims are believed to read on the prior art of record and the rejection is deemed proper.

2) identifying which of the HVAC systems will likely need service by analyzing the test results (Col. 3, lines 10-18)

3) receiving the one or more maintenance signals at each of the HVAC systems, the one or more maintenance signals activating an HVAC component, (col. 2, lines 25-29) performing a self-test on the activated HVAC component based on the received one or more maintenance signal,(Col. 4, lines 8-14) generating self-test result signals from the activated HVAC component based on the self-test performed on the activated HVAC (col. 2, liens 16-20)

4) receiving a test request from the remote location;(col. 2, lines 53-55) performing a test on a dormant component of the HVAC system in response to the test request, (Page 5, seasonal testing paragraph) and transmitting the test result to a location outside of the building structure for subsequent analysis. (Col. 2, lines 59-64)

5) Examiner has failed to provide reasoning as to why it would be obvious to modify Hill et al. to performing a test on the dormant component of the HVAC system in response to a test request provided from a remote location to arrive at claim 1.

It would've been obvious to one skilled in the art at the time of the invention to modify the Hill teaching to include the off season testing taught by AndelmanLelek in order to ensure that the HVAC system was functioning properly before the season change and to minimize/eliminate service interruption.

6) particularly in view of the teaching in AndelmanLelek to have an HVAC contractor physically return (e.g. in the winter) to test portions of systems during the opposite season that they were originally installed.

The Andelmanlelek reference was relied upon to illustrate that testing a dormant component of the HVAC system would be obvious to one of ordinary skill in the art at

the time of the invention. The Hill et al. reference clearly teaches remote testing of HVAC units.

Further, as all of the claimed elements of the invention are well known in the art applicant has failed to show what unexpected results would occur by testing the dormant component of the HVAC system.

7) a test request that is provided from a location remote from the building, and in response to receiving the test request (Hill et al. ;Col. 2, liens 59-64) activating the heating component at a time when the HVAC system would not normally call for heat, and determining if the heating component is in compliance with a number of predetermined conditions.

AndelmenLelek seasonal testing portion states: portions of systems that are weather dependent will retested during the opposite season that they were originally tested. Since these components are retested in the opposite season clearly they were tested in the season they were not required.

8) As discussed above, nowhere do Hill et al. or AndelmanLelek, taken alone or in combination, teach or suggest receiving a test request that is provided from a location remote from the building, and in response to receiving the test request: activating the cooling component at a time when the HVAC system would not normally call for cool, and determining if the cooling component is in compliance with a number of predetermined conditions.

AndelmenLelek seasonal testing portion states: portions of systems that are weather dependent will retested during the opposite season that they were originally

tested. Since these components are retested in the opposite season clearly they were tested in the season they were not required.

The Andelmanlelek reference was relied upon to illustrate that testing a dormant component of the HVAC system would be obvious to one of ordinary skill in the art at the time of the invention. The Hill et al. reference clearly teaches remote testing of HVAC units.

9) transmitting a test request to each of the plurality of HVAC systems from the remote location, performing one or more tests on each of the HVAC systems in response to the test request, and producing a test result for each of the HVAC systems, wherein at least one of the one or more tests that is performed activates and tests one or more of the active or dormant components of an HVAC system, transmitting the test result for each of the HVAC systems to a remote location, and storing the test results at the remote location.

Andelmanlelek seasonal testing portion states: portions of systems that are weather dependent will be retested during the opposite season that they were originally tested. Since these components are retested in the opposite season clearly they were tested in the season they were not required.

The Andelmanlelek reference was relied upon to illustrate that testing a dormant component of the HVAC system would be obvious to one of ordinary skill in the art at the time of the invention. The Hill et al. reference clearly teaches remote testing of HVAC units.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADITYA S. BHAT whose telephone number is (571)272-2270. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2863

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aditya Bhat/

Examiner, Art Unit 2863

July 28, 2008

/Bryan Bui/

Primary Examiner, Art Unit 2863